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| APPLICATION NO. | F | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------------|------|-------------|-------------------------|---------------------|------------------|
| 09/964,100 | | 09/26/2001 | Ikuo Ozawa | 4041K-000036 | 3018 |
| 27572 | 7590 | 07/23/2002 | | | |
| | | Y & PIERCE, | EXAMINER | | |
| P.O. BOX 828 BLOOMFIELD HILLS, MI 48303 | | | | CIRIC, LJILJANA V | |
| • | | | | ART UNIT | PAPER NUMBER |
| | | | | 3743 | |
| | | | DATE MAILED: 07/23/2002 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.



Office Action Summary

Application No. 09/964,100

Applicant(s)

Ozawa et al.

Examiner

Ljiljana V. Ciric

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| | T THOUGH DEAL POLICE TO THE PROPERTY OF THE PR | | | | | |
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| The MAILING DATE of this communication appears on the cover sheet with the correspondence address | | | | | | |
| Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. | | | | | | |
| - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. | | | | | | |
| maning date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. | | | | | | |
| - Failure to reply within the set or extended period for reply will, by statute, cause | the application to become ABANDONED (35 U.S.C. § 133). | | | | | |
| Any reply received by the Office later than three months after the mailing date of earned patent term adjustment. See 37 CFR 1.704(b). | this communication, even if timely filed, may reduce any | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on <u>May 7, 2</u> | | | | | | |
| 2a) ▼ This action is FINAL. 2b) □ This ac | ction is non-final. | | | | | |
| 3) Since this application is in condition for allowance closed in accordance with the practice under Ex pa | except for formal matters, prosecution as to the merits is arte Quayle, 1935 C.D. 11; 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) 🔀 Claim(s) <u>1-7</u> | is/are pending in the application. | | | | | |
| 4a) Of the above, claim(s) none | is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) | is/are allowed. | | | | | |
| 6) 🔀 Claim(s) <u>1-7</u> | is/are rejected. | | | | | |
| 7) Claim(s) | is/are objected to. | | | | | |
| 8) Claims | are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) $\boxed{\mathbf{X}}$ The specification is objected to by the Examiner. | | | | | | |
| 10) ☑ The drawing(s) filed on <u>Sep 26, 2001</u> is/are a) □ accepted or b) ☑ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11) The proposed drawing correction filed on | is: a) \square approved b) \square disapproved by the Examiner. | | | | | |
| If approved, corrected drawings are required in reply | to this Office action. | | | | | |
| 12) The oath or declaration is objected to by the Exam | niner. | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☑ All b) ☐ Some* c) ☐ None of: | | | | | | |
| 1. 🕱 Certified copies of the priority documents ha | ve been received. | | | | | |
| 2. \square Certified copies of the priority documents ha | ve been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| *See the attached detailed Office action for a list of the | | | | | | |
| 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). | | | | | | |
| a) The translation of the foreign language provisional application has been received. | | | | | | |
| 15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | | | | |
| 1) X Notice of References Cited (PTO-892) | 4) Interview Summary (PTO-413) Paper No(s). | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) Notice of Informal Patent Application (PTO-152) | | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). | 6) Cther: | | | | | |

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DETAILED ACTION

Response to Amendment

- 1. This Office action is in response to the amendment and arguments filed on May 7, 2002.
- 2. Original claims 1 through 6 (as amended) and new claim 7 remain in the application.

Response to Arguments

3. Applicant's arguments with respect to claims 1 through 7 have been considered but are moot in view of the new ground(s) of rejection.

Applicant is nevertheless respectfully reminded that claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Applicant is also respectfully reminded that claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). Also, "[A]pparatus claims cover what a device *is*, not what a device *does*. (Emphasis in original). *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

Priority

4. Upon reconsideration of the application, it is hereby noted that the paragraph appearing on page 1, lines 5-10, of the specification, while referring to both the parent PUT application and to two of the three Japanese priority document, does not refer to the third Japanese priority document, JP 2000-303584. Is this an inadvertent omission? If so, please correct as needed for

consistency. If not, what is the reason for the omission? Should the priority of the instant application then be changed? Please respond to clarify and/or correct as needed.

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following features must be shown or the feature(s) canceled from the claim(s): a second air path for leading the air that has passed through the radiator out of the engine compartment as recited in each of claims 3 and 6. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

- 6. Receipt and entry of the amended abstract is hereby acknowledged.
- 7. The amended abstract of the disclosure is objected to because of various informalities, such as: "configured of" in line 1 of the abstract should be replaced with "configured as"; the closing parenthesis should be added immediately following "(100" in line 3 of the abstract; the third sentence appears to be contradictory to the first sentence as written--recommend replacing "a duct structure" with "a separate duct structure" or similar, as appropriate; "blown" should be replaced with "blown in" in line 5; "while at the same time improving the hermetic sealing between the condenser (200) and the radiator (100) with simple means" is neither concise nor

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idiomatically proper as written--recommend replacing with "while simultaneously preventing leakage between the condenser (200) and the radiator (100) without adding complex structure" or similar, as appropriate. Correction is required. See MPEP § 608.01(b).

Claim Objections

8. Claims 1 through 7 are objected to because of the following informalities: "with respect to air flow flowing through" [claim 1, line 5; claim 4, line 5] should be replaced with "with respect to air flowing through" for improved conciseness and readability; "an engine compartment and" [claim 1, line 8] should be replaced with "an engine compartment of the automotive vehicle" for improved clarity; and, "fro closing" [claim 7, line 2] should be replaced with "for closing".

Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 112

- 9. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 10. Claims 1 through 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to independent base claims 1, the limitations "arranged upstream of the radiator and the heat exchanger with respect to the air flow for blowing the air toward the radiator and the heat exchanger" are not clear as written, thereby rendering indefinite the claim and all claims depending therefrom. Independent base claim 4 contains the similarly unclear

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limitation "arranged upstream of the radiator and the heat exchanger with respect to the air flow for blowing air toward the radiator and the heat exchanger," thereby rendering indefinite claim 4 and all claims depending therefrom.

Claims 2, 3, 5, and 6 are still generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and contain grammatical and idiomatic errors. For example, what exactly is meant by the limitations "integrally formed by resin and fixed to a vehicle body at the vehicle front end portion thereby to constitute a vehicle structural member" as cited in claim 2 and which particular structural configuration does this correspond to? Claim 5 contains a parallel and similarly unclear set of limitations. Each of claims 3 and 6 recites the unclear "wherein said front end panel is integrally formed with a first air path". These latter claims thus recite a structural member, i.e., a front end panel, as being integrally formed with an element which is not a structural member, namely an air path, instead of another element which is a structural member, such as a duct.

With regard to new claim 7 as written, it is not clear whether the shroud as cited in line 2 of the claim corresponds to the duct structure as cited in line 8 of base claim 1 or whether the two elements are distinct from each other.

There is insufficient antecedent basis in the claims for the following limitations in the claims, for example: "the air introduced from the inlet opening" [claim 1, lines 8-9; claim 4, lines 11-12]--recommend replacing with "air introduced from the inlet opening"; "the air flow" [claim 1, line 13; claim 4, line 13]; "the air that has passed through" [claim 3, line 2; claim 3,

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lines 3-4; claim 6, line 2; claim 6, lines 3-4]; and, "the air blown by the fan unit" [claim 7, line 3]-recommend replacing with "any air blown by the fan unit" or similar, as appropriate.

The above is an indicative, but not necessarily an exhaustive, list of 35 U.S.C. 112, second paragraph, problems. Applicant is therefore advised to carefully review all of the claims for additional problems. Correction is required of all of the 35 U.S.C. 112, second paragraph problems, whether or not these were particularly pointed out above.

Claim Rejections - 35 U.S.C. § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 12. Alternately for claims 1 through 6, and as best can be understood in view of the indefiniteness of the claims, claims 1 through 7 are rejected under 35 U.S.C. 102(b) as being anticipated by *Tepas et al.*

Tepas et al. discloses a front end structure or assembly essentially as claimed, including: a front end panel including fan unit 54 and a fan shroud 38 made from plastic molding (i.e., "integrally formed by resin" as claimed); a radiator 22; a heat exchanger or condenser 40; and, a structural member comprising tie bars 14 and 16 and supports 18 as well as inlet opening 12, which structural member, as joined with the radiator 22 and the heat exchanger or condenser 40 forms a "duct structural member" as claimed. The radiator 22 and the heat exchanger or

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condenser 40 are arranged in series with respect to the air flow therethrough, and are fixed to the front end panel. The fan unit 54 is arranged upstream of the radiator 22 and of the heat exchanger or condenser 40. The two distinct air paths through the two fans in fan unit 54 corresponds to the first and second air paths as claimed. Little or no patentable weight is given to various functional limitations appearing in the apparatus claims as written.

The reference thus reads on the claims.

13. Alternately, and as best can be understood in view of the indefiniteness of the claims, claims 1 through 7 are rejected under 35 U.S.C. 102(b) as being anticipated by *Bolton et al.*

Bolton et al. discloses a front end structure essentially as claimed, including: a radiator 24; a heat exchanger or condenser 26; a resinous front end panel including both a fan unit 22 (arranged upstream of the heat exchanger or condenser 26 and of the radiator 24) and a fan shroud 20 or 38; and, a mounting panel 30 which reads on the duct structure as claimed.

The reference thus reads on the claims.

Claim Rejections - 35 U.S.C. § 103

- 14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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15. As best can be understood in view of the indefiniteness of the claims, claims 1 through 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Holka*.

Holka discloses the front end structure of an automotive vehicle essentially as claimed, including: an integrally formed vehicle front end panel 10 fabricated from a synthetic polymeric material (i.e., a resinous material); vehicle front end parts including a radiator and another heat exchanger (such as a condenser) arranged in series to form a heat exchanger assembly 14 [column 2, lines 30-32], the heat exchanger assembly 14 being part of and fixed to the front end panel 10; a duct structure 24 and 26 sealably connected to the side edges 22 of the heat exchanger assembly 14 and thus enclosing a circumference of the radiator and of the other heat exchanger forming the heat exchanger assembly 14 [column 2, lines 41-44], the front face 18 of the heat exchanger assembly 14 corresponding to the air inlet opening for introducing air into the engine compartment as claimed [column 2, lines 32-35]; and, fan units 34 or 44 for drawing air through the heat exchanger assembly 14.

Although *Holka* discloses the fan units 34 or 44 as being downstream of the heat exchanger assembly 14 and not upstream of the latter as claimed, it is hereby noted that, absent the establishment of unexpected results, there is no invention in shifting the location of the fan units 34 or 44 relative to the heat exchanger assembly 14 since the operation of the front end structure 10 would not be modified by the shift; whether the fan units 34 or 44 are located upstream or downstream of the heat exchanger assembly 14, the fan units serve 34 or 44 serve to

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draw air through the radiator and other heat exchanger in the heat exchanger assembly 14. See <u>In</u> re <u>Japikse</u>, 86 USPQ 70 (CCPA 1950).

It would thus have been obvious to one skilled in the art at the time of invention to modify the vehicular front end structure 10 of *Holka* by shifting the location of fan units 34 or 44 to a location upstream of the heat exchanger assembly 14 in order to, for example, reduce the width of the front end structure 10 as needed to meet vehicle design constraints.

Conclusion

- 16. The following additional prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Joscher et al., Peter, Kanemitsu et al., Iwasaki et al., Thompson et al., Tsukiana et al., Acre et al., Acre (filed August 22, 2000), and Avequin et al. (filed January 29, 2001) each discloses a vehicular front end structure including a combination of heat exchangers and at least one fan.
- 17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

18. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Ljiljana (Lil) V. Ciric, whose telephone number is (703) 308-3925. While

she works a flexible schedule that varies from day to day and from week to week, Examiner Ciric

may generally be reached at the Office during the work week between the hours of 10 a.m. and 6 may

p.m. ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Henry Bennett, can be reached on (703) 308-0101. The fax phone number is (703) 305-3463.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Group receptionist whose telephone number is (703) 308-0861.

lvc

LILLIANA CIRIC

July 19, 2002

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